

## **5.20 CONSTRUCTION IMPACTS**

### **5.20.1 Background**

An assessment of potential construction impacts is required when preparing an Environmental Impact Statement. In accordance with FAA Order 5050.4, *Airport Environmental Handbook*, “the environmental document must include a general description of the type and nature of the construction and measures to be taken to minimize potential adverse effects”. Construction impacts are commonly short-term and temporary in nature. Construction activities have the potential to impact environmental quality in the surrounding area. Typical impacts resulting from airport construction include increased noise, fugitive dust emissions and soil erosion. Impacts resulting from the proposed development are not anticipated to be permanent and would occur primarily during the construction season.

### **5.20.2 Methodology**

Federal Aviation Administration (FAA) Order 5050.4 references FAA Advisory Circular (AC) 150/5370-10, *Standards for Specifying Construction of Airports*, Change 10, Item P-156 “Temporary Air and Water Pollution, Soil Erosion, and Siltation Control” as the primary source for identifying sound construction practices to minimize construction impacts. These Federally designed control measures will be incorporated into all temporary erosion and sedimentation controls, as well as air and water pollution control measures during the Proposed Action and all construction projects at Gary/Chicago International Airport.

### **5.20.3 Existing Conditions – 2000**

The Gary/Chicago International Airport typically has miscellaneous construction projects under way in any given year. The year 2000 has been used as a baseline year for comparison purposes. Minor construction improvements were under way in 2000, including interior terminal renovations and the construction of a new fuel farm facility. In addition, the construction of the corporate hangar that currently serves Boeing was completed in 2000. The Federal construction practices identified in the above referenced advisory circular were followed along with required permitting activities. Existing environmental baseline conditions have been described in detail in Chapters 4, Affected Environment and this chapter of this EIS document. Existing conditions have been provided for noise, air quality, water quality, hazardous waste, soil, wetlands, floodplains, and land use.

### **5.20.4 Future Conditions -- 2007**

Various construction activities would occur under the Proposed Action. The Proposed Action has been grouped into four construction programs (1) Improvements to conform existing Runway 12-30 to current FAA standards (including the relocation of the EJ&E Railway), (2) Improvements to provide additional runway length on Runway 12-30, (3) Expansion of the passenger terminal facilities at existing terminal site and (4) Purchase and reserve sites for potential development of new passenger

terminal area with associated uses and new cargo area. In addition, contaminated sites will undergo clean up prior to and along with the construction activities of the four major construction programs, and where appropriate in the areas reserved for potential long-term aviation development. Acquisition and construction is anticipated to begin in 2005 and continue through 2007. The construction period may vary depending on the phasing of each project and construction specifications. In this section, a compressed 3-year construction schedule has been assumed to validate that this can occur without detrimental impacts to the environment.

Suggested staging areas are designated for each project, providing locations for equipment, material storage and waste storage. These staging areas are located in close proximity to the construction sites to minimize travel distance. Major haul routes that minimize impact to local routes have been selected for each project.

The suggested long-term staging areas serving as equipment, storage and waste site is located in the northwest section of the study area south of the anticipated runway extension, and have been illustrated on **Exhibit 5.20-1**. A remediation action plan for the northwest section of the study area will be implemented prior to the commencement of any construction activities. These locations will serve as the distribution sites for materials and equipment due to its proximity to the major construction areas and access to Cline Avenue via the Frontage Road and the Toll Road Connector. For the expansion of the terminal and apron, the suggested staging site is located east of the existing terminal in existing parking lot facilities in this area. This will provide ideal access to the construction site and Industrial Highway.

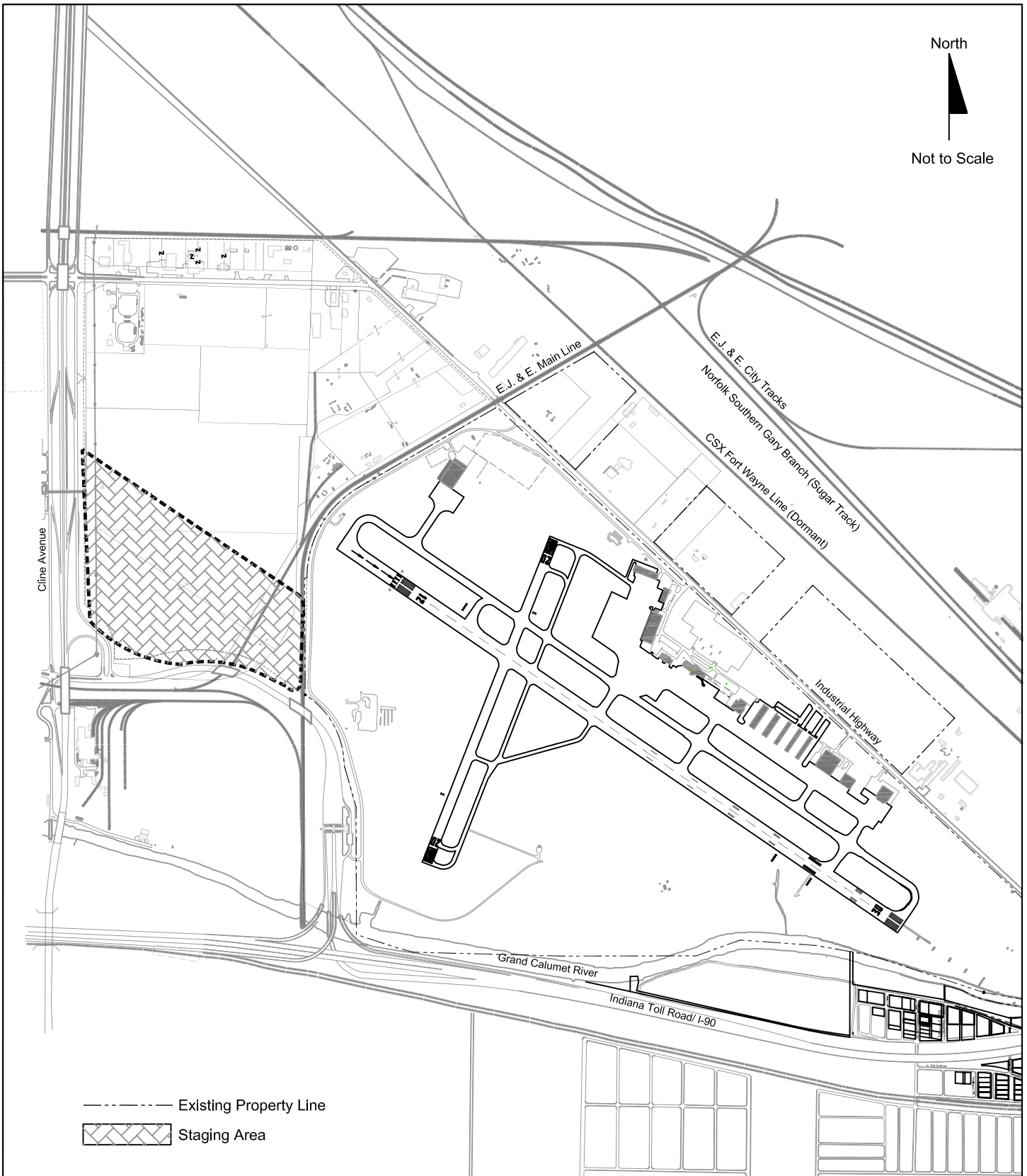
#### **5.20.4.1 No Action**

The no action scenario assumes the airport would continue to operate but without any new development between 2004 and 2007. Under these conditions there would be no construction activities associated with the proposal occurring; therefore, there would be no construction impacts.

#### **5.20.4.2 Improvements to Existing Runway 12-30 to Conform to FAA Standards**

Various improvements to the existing Runway 12-30 are required to insure it conforms to current FAA Standards. The improvements with construction elements include the relocation of the EJ&E Railway, relocation of the airside perimeter roadway (including the addition of a southwest access roadway), burial of the transmission power line, extension of Runway 12 to maintain the existing 7,000-foot by 150-foot runway (an extension of approximately 546 feet to the northwest proposed), relocation of the Runway 12-30 nav aids, and improvements of the runway safety area for Runway 12 (grading and compaction of approximately 1,100 feet beyond the new runway end) and extension of parallel Taxiway A to the new runway end. Of these construction items, the burial of

North  
Not to Scale



## EXHIBIT 5.20-1 Proposed Long-Term Staging Area

April 8, 2004

the power lines is the first construction project to begin, with an anticipated start date in 2004. In addition to these construction items, the remediation of hazardous materials from properties acquired for the runway improvements may also be commencing as early as 2004.

Anticipated construction activities will include clearing, grading, excavation, filling, backfilling, compaction, drainage structures, tree cutting and vegetation clearing, waste disposal, and pavement removal.

#### **5.20.4.3 Improvements to Provide Additional Runway Length on Runway 12-30**

The existing Runway 12-30 will be extended to provide additional runway length totaling 8,900 feet. These improvements are proposed to occur simultaneously with and/or require the accomplishment of the improvements to existing Runway 12-30 to conform to FAA standards. Improvements with construction elements include extension of Runway 12-30 to the northwest (approximately 1,354 feet by 150 feet for a total extension of 1,900 feet with the approximately 546 feet extension addressed previously and needed to provide safety areas to conform to FAA standards), relocation of Runway 12 nav aids, further extension of parallel Taxiway A to the new end of Runway 12, construction of deicing hold pads on Taxiway A at the end of Runway 12 and Runway 30, and development of two high speed exit taxiways.

Anticipated construction activities will include clearing, grading, excavation, filling, backfilling, compaction, drainage structures, tree cutting and vegetation clearing, waste disposal, and pavement. Anticipated construction equipment includes excavator, haul trucks, forklift, compactor, and bulldozer.

#### **5.20.4.4 Expansion of Existing Terminal**

The terminal expansion provides approximately an additional 22,000 square feet of space for existing tenants and the addition of one aircraft gate to the expanded lounge area. The existing apron between Taxiways C and A2 would be expanded to create an additional 5,500 square yards of terminal apron space.

The scope and area of this construction project is much smaller than the runway improvements described above. Even so, anticipated construction activities will include site preparation, grading, excavation, filling, backfilling, compaction, drainage structures, waste disposal, and pavement. Anticipated construction equipment includes excavator, haul trucks, forklift, compactor, and bulldozer.

#### **5.20.4.5 Acquisition and/or Reservation of Sites for Future Passenger Terminal and Air Cargo Facilities**

There are no construction activities identified as a part of the acquisition and reservation of sites for future aviation-related activities other than remediation of contaminated soil that is expected to be done as part of the runway safety area/runway extension improvements and associated projects. Even so, as a part of the acquisition of each new site area, thorough reviews of the property will be conducted to determine if there are hazardous materials that will require remediation. Where access to parcels has been available, environmental assessments have been conducted and some remediation requirements have been identified. Any additional remediation will be coordinated with the appropriate regulatory agencies to assure that the required cleanup standards are achieved.

#### **5.20.5 Summary of Findings**

The construction program for the Proposed Action has been analyzed in regard to potential construction impacts in the following nine areas: soil erosion controls, water quality, wetlands, air quality, noise, solid and hazardous waste, source and quality of materials, socioeconomic impacts, and operation of existing airport during construction.

##### **5.20.5.1 Soil Erosion Controls**

Construction activities related to the Proposed Action have the potential to increase soil erosion unless appropriate countermeasures are taken. Site preparation activities such as vegetation clearing, excavation and grading result in soil disturbance. Exposed soil is susceptible to erosion by wind and stormwater runoff and can impact water quality in the Grand Calumet River and nearby wetlands. As part of the National Pollution Discharge Elimination System (NPDES) Stormwater Permit administered by the IDEM Office of Water Quality, a Soil Erosion Control Plan must be filed with the Lake County Soil and Water Conservation District.

A detailed, site-specific Erosion and Sedimentation (E&S) Control Plan would be prepared to address all earth disturbance aspects of the proposed improvements. The E&S Control Plan would include the use of best management practices and engineering controls to mitigate anticipated erosion and sedimentation impacts throughout construction, as well as post-construction during the operation of the proposed improvements. Measures may include the use of silt fencing, sediment berms, interceptor ditches, hay bales, riprap dams, sedimentation basins, and other erosion and sediment control structures.

Appropriate implementation of the Soil Erosion and Sedimentation Plan will minimize soil erosion to insignificant levels. Once construction is complete, landscaping techniques will prevent further erosion of disturbed areas.

#### **5.20.5.2 Water Quality**

Ground disturbing construction activities result in soil erosion that could impact water quality unless appropriate countermeasures are taken. Construction activities such as land clearing and excavation expose soil to erosion processes and increase stormwater runoff. Wind and storm events transport soils to receiving waterways, resulting in an increase in suspended sediment. Stormwater runoff containing oil, grease, solvent, and metals from construction equipment and activities can also impact water quality.

All necessary mitigation actions will be implemented to minimize construction impacts to the Grand Calumet River and groundwater to ensure compliance with state and Federal water quality standards. Stormwater runoff from the airport site currently flows through a series of earthen ditches and piped channels to the Grand Calumet River.

In accordance with Rule 5 of IDEM's stormwater program, construction activities involving more than five acres require a NPDES stormwater discharge permit. Since the proposed project will involve greater than 5 acres of construction, the Gary/Chicago International Airport will complete the following tasks in accordance with Rule 5: File a Notices of Intent (NOI) prior to the start of work; file a soil erosion control plan with the Lake County Soil and Water Conservation District; comply with the requirements outlined in the permit; and erect and maintain erosion control fences to prevent soil erosion.

A detailed, site-specific E&S Control Plan would be prepared to address all earth disturbance aspects of the proposed improvements. The E&S Control Plan would include the use of Best Management Practices and engineering controls to mitigate anticipated erosion and sedimentation impacts throughout construction, as well as post-construction during the operation of the proposed improvements. Measures may include the use of silt fencing, sediment berms, interceptor ditches, hay bales, riprap dams, sedimentation basins, and other erosion and sediment control structures.

The E&S Control Plan would also include a seeding and revegetation plan for temporarily disturbed areas. Seeding and revegetation shall follow the appropriate seasonal periods. Use of native grasses to revegetate disturbed soils shall occur where feasible, effective and economical. No plant materials considered to be invasive as defined by Executive Order 13112 shall be used; regional native plant species shall be favored as defined by Executive Order 13148. If measures in the E&S Control plan are approved and correctly utilized during construction and operation, soil erosion and resulting sedimentation of the Grand Calumet River will be minimized to less than significant levels.

Erosion control measures outlined in the E&S Control Plan and proper use and maintenance of construction equipment and materials will ensure minimal impact to water quality.

Several of the construction activities would occur to the northwest of Runway 12-30 in the contaminated Asphalt Wetland. As part of the construction activities, contaminated groundwater and soil will be remediated to reduce or eliminate the risk of groundwater contaminants (primarily metals and organic compounds) and to prevent further migration of contaminated groundwater.<sup>1</sup> The remediation would reduce or eliminate the discharge of contaminated groundwater to the Grand Calumet River. The remaining thick black tank bottoms and abandoned drums would be removed and disposed in an environmentally sensitive manner. Surficial soils would be removed and replaced with clean fill. Offsite migration of contaminated groundwater has been identified as an important factor; therefore, control of contaminated water movement will be implemented along with the installation of extraction wells to pump and treat the groundwater unless it can be confirmed that no new contaminants are being introduced within the up-gradient watershed boundary. Although physical barriers like low permeability barrier (slurry wall) or hydraulic barriers (pumping system) have been considered to prevent both offsite and onsite migration of containment plumes and remove or separate contaminants from the media, these measures will only be used if absolutely necessary to meet the cleanup objectives established for this area.

### **5.20.5.3 Wetlands**

Indirect and direct impacts to wetlands could occur during the construction elements of the Proposed Action unless appropriate countermeasures are taken. Indirect impacts to wetlands such as erosion, sedimentation and vegetation removal result from earth disturbing construction activities. Stormwater runoff containing oil, grease, solvent, and metals from construction equipment and activities can also impact wetland quality. All necessary efforts will be made to avoid and minimize impacts. This includes properly installed and maintained soil erosion and sedimentation controls, use of fencing to limit access near wetlands, locating staging areas away from wetland boundaries, and installing stormwater drains.

Filling, grading and paving of wetland areas will occur during the construction elements of the Proposed Action, as identified in Section 5.11, Wetlands. A Clean Water Section 404 permit from the Corp of Engineers is required prior to commencement of any construction activity. Section 404 of the Clean Water Act regulates the discharge of dredged or fill material into all "waters of the United States". The requirement of a Section 404 permit from the Corp of Engineers triggers the need for a Section 401 Water Quality Certification from IDEM, Office of Water Quality. All necessary mitigation efforts will be implemented to minimize adverse impacts to wetlands as part of the permitting process. Detailed mitigation concepts are outlined in Section 5.11, Wetlands.

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<sup>1</sup> Clean World Engineering. 2003. *Conceptual Remediation Plan NBD Bank Trust Property Located Within the Runway Extension Zone Northwest of Gary/Chicago Airport*.

#### 5.20.5.4 Air Quality

Construction air quality impacts are related to defined construction periods, effects of construction management, equipment utilization, and contractor activities. Pollutants of concern for this project include PM<sub>10</sub> (particulate matter)/fugitive dust, PM<sub>2.5</sub>, VOC, NO<sub>x</sub>, and CO emissions, depending upon the size of the project and length of the construction period. The sources of emissions are demolition, structures construction, land clearing, off-road vehicles and equipment used onsite, storage of materials onsite, truck movements, and employee vehicles traveling to and from the site. Since the study area is classified by U.S. EPA as a nonattainment or maintenance area for various criteria pollutants, the project construction has to comply with 40 CFR 93.153(b), which states that conformity determinations are required. The State of Indiana has also established Air Rule 326 IAC 16-3-1, Rule 3 General Conformity to require Federal actions to be subject to the provisions in this rule. Indiana incorporates the guidelines and procedures in U.S. EPA 40 CFR 51, Subpart W to determine the conformity. While the Gary/Chicago International Airport construction would be expected to apply to the FAA for Federal participation in funding and approval, and because this project is not classified as exempt from conformity determination within a nonattainment area, the project construction should be evaluated under the General Conformity Rule. The goal of the construction impact conformity analysis is to determine whether the net emissions increase due to the project construction would exceed the established de minimis threshold levels. The de minimis threshold levels are established by U.S. EPA to identify Federal actions whose emissions could be determined to be so small as to be negligible or insignificant. A quantitative construction related impact evaluation for the proposed Gary/Chicago International Airport construction activities was conducted for all constructions modules during scheduled construction year 2005, 2006, and 2007 respectively, to evaluate pollutant emissions and air quality conformity. The major pollutants analyzed were ozone precursors - volatile organic compounds (VOC) and nitrogen oxides (NO<sub>x</sub>), SO<sub>2</sub>, PM, and carbon monoxide (CO). The emissions resulting from project construction emissions were then determined as complying with conformity de minimis levels:

- 25 tons/year of VOC and NO<sub>x</sub> (within severe ozone nonattainment area)
- 100 tons/year of PM and CO (maintenance area)
- 100 tons/year of SO<sub>2</sub> (moderate nonattainment)

This conformity analysis and air emissions evaluation procedures followed the criteria and procedures regulated in 40 CFR Parts 6, 51, and 93, Determining Conformity of General Federal Actions to State or Federal Implementation Plans; Final Rule (November 30, 1993). Technical methodologies in this analysis were based on the U.S. EPA's guidelines and formats pertaining to evaluation of pollutants resulting from construction activities and vehicles, including Guidelines for Air Quality Maintenance Planning and Analysis Volume 9 (Revised); AP-42 Compilation of Air Pollutant Emission Factors, and NONROAD model. The construction schedules, module parameters and phases, construction activities, layout, and work zones, as well as types, sizes,



amounts and operating hours, average horsepower (hp) of the construction equipment to be utilized were evaluated based on airport construction engineering data. The CO, SOx, VOC, NOx, and particulates (PM) emissions generated from construction vehicles and equipments were estimated by utilizing the most recent approved U.S. EPA emission factors or NONROAD model for various vehicles and equipment utilized in the construction and remediation estimates. The total air emissions resulting from all construction modules during all years – 2005, 2006, and 2007 were then summed up to determine their Impacts and the project conformity during construction period.

While emission analysis assumptions and detailed results for all analyzed construction activities of each module for all years are presented as spreadsheets contained in Appendix F, the following **Exhibit 5.20-2** summarizes total air emissions resulting from the proposed 2005, 2006, and 2007 construction activities.

<b>Exhibit 5.20-2</b> <b>Annual Air Emission Burden Of Construction Equipment</b> <b>(tons/year)</b>							
Criteria Pollutant		Year 2005 Construction		Year 2006 Construction		Year 2007 Construction	
	Threshold (tons/year)	Total Emission (tons/year)		Total Emission* (tons/year)		Total Emission* (tons/year)	
VOC	25	1.71		1.17		1.22	
NOx	25	11.63		18.14		19.97	
CO	100	4.24		6.65		7.32	
PM-10	100	0.71		1.17		1.29	
PM-2.5	-	0.67		1.09		1.22	
SOx	100	1.73		2.73		3.41	

\*: For worst-case construction including both Route 1D & 1-E in Module 5A.

Source: *The Louis Berger Group, Inc., 2004*

For all cases examined, the annual emissions resulting from construction equipment and vehicles during year 2005, 2006, and 2007 are below (within) the conformity emission thresholds. The construction emissions will be even lower if Module 5 construction includes Route 1D only. Therefore, the Gary/Chicago International Airport construction activities will conform to the General Conformity Rules and CAAA requirements.

Moreover, the onsite construction management would be encouraged to include general environmental commitments from contractors and construction activities. Construction work would be planned and executed in a manner that would minimize air emissions and will be accomplished in light of the site's proximity to users of the surrounding environment. These management issues could include:

- Encouraging the use of low sulfur diesel fuel in construction equipment with engine horsepower (HP) rating of 60 HP and above.

- Where practical, encouraging the use of diesel engine retrofit technology in equipment to further reduce emissions.
- Limit unnecessary idling times.
- Locate diesel powered exhausts away from local residential or building fresh air intake
- Onsite equipment is encouraged to use low operating speed, such as to 5 miles per hour (MPH), to eliminate dust and PM pollutants from tires and brakes.
- Control dust related to construction site through a plan for spraying of a suppressing agent on dust pile (non-hazardous, biodegradable); control or containment of fugitive dust via tarps or other methods of containment; and adjustment for meteorological conditions as appropriate.
- Utilize water or appropriate liquids for dust control during demolition, land clearing, grading, on materials stockpiled on the ground surfaces, and other activities.
- Cover open-body trucks for transporting materials.
- Remove surface materials promptly.

The benefits of these management plans would help proactively avoid or further reduce potential impacts to prevent air quality deterioration. The current emission removal technologies if applied to diesel engines can reduce air emissions by approximately 40% for PM, and 50% for CO and other pollutants. It is anticipated that the proposed project would not contribute to air toxics and asbestos emissions during site construction works. The construction emissions; resulting from construction equipment and vehicles engine exhausts, fugitive dust, as well as from excavation, demolition, and backfill activities, etc.; were evaluated based on U.S. EPA procedures. The results are compared to the General Conformity Thresholds for various air pollutants. As a result of this construction emissions analysis and all present and future regulations, practices, and construction plans, the construction impacts of the proposed project would be insignificant.

#### **5.20.5.5 Noise**

Temporary and localized increase in noise levels will occur during construction of the projects. The noise magnitude depends on the construction activity, equipment, duration, and proximity to noise receptors or noise sensitive areas. The major sources of construction activities will be the heavy equipment (e.g. bulldozers, pile drivers, compressors, generators) operated at the site. Typical noise levels of equipment and construction activities are presented in **Exhibit 5.20-3**.

**Exhibit 5.20-3**  
**Typical Noise Levels of Principal Construction Equipment**  
**(Noise Level in dBA at 50 Feet)**

Excavation and Earth Moving		Structure Construction		Grading and Paving		Landscaping and Clean-up	
Activity/Source	Level (dBA)	Activity/Source	Level (dBA)	Activity/Source	Level (dBA)	Activity/Source	Level (dBA)
Bulldozer	80	Crane	75-87	Grader	80-93	Bulldozer	80
Backhoe	72-93	Welding Generator	71-82	Roller	73-75	Backhoe	72-93
Front End Loader	72-84	Concrete Mixer	74-88	Jack Hammer	81-98	Truck	83-94
Dump Truck	83-94	Concrete Pump	81-84	Paver	86-88	Front End Loader	72-84
Scraper	80-93	Concrete Vibrator	76	Truck	84-94	Paver	86-88
Demolition Crane	75-87	Air Compressor	74-87	Tamper	74-77		
		Pneumatic Tool	81-98				
		Truck	83-94				

Source: U.S Environmental Protection Agency, 1971.

Noise impacts may also occur from increased traffic near the vicinity of the construction sites.

Transport of materials to construction sites and between staging areas will increase traffic noise. Traffic routes will be designated to minimize use of local streets and identify appropriate haul routes.

Noise levels will increase during construction, however these construction activities are not anticipated to have any significant adverse effect on surrounding land use due to the temporary nature of construction activity and the noise level reductions associated with distance attenuation. Noise levels diminish with distance at a rate of 6 dBA per doubling of distance for stationary sources. The closest noise sensitive receptors are located approximately 1,700 feet from the closest construction areas. All construction activity-related noise will be temporary, and will end with the completion of construction.

Construction activities usually occur during weekday, daytime hours, during the period when the majority of people are the least noise-sensitive and background noise levels are the highest. Although construction noise levels may present a noise impact during some phases, the impact will be short-lived because of the short-term and intermittent nature of construction noise.

#### **5.20.5.6 Solid and Hazardous Waste**

Waste generated during construction will consist of both non-hazardous and hazardous waste. Most waste generated during construction will consist of non-hazardous waste. Although specific quantities have not been estimated, construction waste generated may include excavated material from airside perimeter roads, concrete, asphalt, and soil. If remediation efforts are not completed prior to the commencement of construction activities, the remediation action plan (RAP) will need to be reevaluated to determine the impact of the construction on achieving the required cleanup goals. If necessary, the revised RAP will continue once construction is complete.

Construction activities have the potential to unearth contaminated areas from previous land use. Previously identified areas of contamination and current remediation activity include the Conservation Chemical Company Site and the MIDCO I superfund site. An Environmental Site Assessment conducted by Clean World Engineering identified several contaminated sites within the construction zone of the proposed runway improvements and extension. A remediation action plan has been developed as part of the EIS and will be implemented prior to and along with the Proposed Action as identified in Section 5.19, Hazardous Materials.

An initial Phase I ESA, conducted for the parcels associated with the future passenger terminal and air cargo facilities, identified some areas of contamination. Based upon the limited review, some cleanup requirements are anticipated. Remediation of these future sites may occur in conjunction with the runway improvement and expansion remediation activities.

Special provisions will be included in the construction document to address the potential for encountering hazardous materials. All applicable Federal, state and local regulations will be followed for the cleanup and disposal of hazardous waste during construction activities.

#### **5.20.5.7 Source and Quality of Construction Materials**

The Proposed Action will require the irretrievable commitment of various construction materials. All use of natural resources will comply with Federal, state and local environmental standards. As site preparation involves grading and filling of project sites, clean fill material will be reused from excavated areas. Asphalt from previous airport construction projects will be reused for the runway extension.

#### **5.20.5.8 Socioeconomic Impacts**

The proposed construction of the improvements and expansion of the Gary/Chicago International Airport will generate temporary economic benefits to the Gary and Chicago regional economy during the construction phase. The expenditures of Federal, State and local funds upon materials and labor will create direct economic benefits in the region. Indirect benefits will also occur when supplying industries use these initial direct revenues to purchase required goods and services as part of their production process. A detailed analysis of socioeconomic impacts of construction is provided in Section 5.3, Direct Socioeconomic Impacts.

#### **5.20.5.9 Operations of Existing Airport during Construction**

Construction activities will result in short-term impacts to airport operations. Construction details, procedures and equipment will determine the types of temporary operational changes required to complete the runway improvement. Operational changes may include runway, taxiway and road

restrictions and closures. A detailed construction plan will be developed to minimize impacts to airport operations.

#### **5.20.6 Mitigation**

In order to minimize construction impacts, the Proposed Action will include the following pollution control measures:

- A detailed, site-specific E&S Control Plan will be prepared to address all earth disturbance aspects of the Proposed Action.
- The airport will follow the requirements of NPDES Stormwater Permit, State of Indiana IDEM Rule 5, including filing a Notice of Intent prior to the start of work, filing a Soil Erosion Control Plan with the County Soil and Water Conservation District, complying with the requirements in the permit to prevent soil erosion, and publishing a notice of planned construction activity in a local newspaper of general circulation.
- A variety of control measures will be implemented to minimize fugitive dust emissions, including the use of water or other appropriate liquids to control dust during land clearing, grading and construction operations; tarp covers on trucks to transporting construction materials to and from the site, the wetting of unpaved roadways and material stockpiles, removing loose material, vehicle cleaning, and landscaping of disturbed areas.
- Care will be taken when identifying haul routes and construction activity hours to avoid residential areas in order to minimize noise impacts.
- Because of known contamination sites within the study area, special provisions will be included in the construction document to address the potential for encountering hazardous materials. All applicable Federal, state, and local regulations will be followed for the handling cleanup and disposal of hazardous waste during construction activities.

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